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Mesostructured sillicate-based materials

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LIST OF PUBLICATIONS

1. **Thermal Detemplation of SBA-15 Mesophases. Effect of the Activation Protocol on the Framework Contraction**, Z. Zhang, J. Yin, H.J. Heeres, I. Melián-Cabrera; *Microporous and Mesoporous Materials*, 176 (2013) 103–111.
2. **On the drug adsorption capacity of SBA-15 obtained from various detemplation protocols**. Z. Zhang, D. Santangelo, G. ten Brink, B.J. Kooi, J.A. Moulijn, I. Melián-Cabrera. *Materials Letters* 131, (2014) 186-189. 2014.
3. **Detemplation of soft mesoporous silica nanoparticles with structural preservation**, L. López Pérez, M.J. Ortiz Iniesta, Z. Zhang, I. Agirrezabal-Telleria, M. Santes, H.Jan Heeres, Ignacio Melián-Cabrera, *Journal of Materials Chemistry A*, 1 (2013) 4747.
4. **On the mild detemplation of colloidal mesoporous silica nanoparticles via a single-step non-thermal detemplation route**, Z. Zhang, M.J. Ortiz-Iniesta, A.Mayoral, I. Melián-Cabrera, *submitted*.
5. **Modifying the Hierarchical Porosity of SBA-15 via Mild-detemplation Followed by Secondary Treatments**, Z. Zhang, I. Melián-Cabrera, *submitted*.
6. **Screening studies of the pyrolysis oil acid-catalyzed alcoholysis with selective water adsorption**, R. Kumar Pazhavelikkakath Purushothaman, T. Buntara, Z. Zhang, I.J. Vehoff, H.J. Heeres, S.R.A. Kersten, K. Seshan, I. Melián-Cabrera, *submitted*.

CONFERENCE PROCEEDINGS

1. **Thermal detemplation of SBA-15 materials-Unpredicted impact of low fraction PEO burn-off on structural damage**, Z. Zhang, J. Yin, H.J. Heeres, I. Melián-Cabrera, XIth The Netherlands' Catalysis and Chemistry Conference (NCCC11), Noordwijkerhout, The Netherlands, March 2010.
2. **Proof of thermal shrinkage induced by walled microporous PEO corona burn-off in SBA-15 materials**, Z. Zhang, J. Yin, H.J. Heeres, I. Melián-Cabrera, 16th International Zeolite Conference, Italy, 2011.
3. **Comprehensive detemplation studies of SBA-15 combining aspects of template removal and structural order preservation**, Z. Zhang, J. Yin, H.J. Heeres, I. Melián-Cabrera, 4th International Symposium on Advanced micro- and Mesoporous Materials, Bulgaria, 2011.
4. **Detemplation of soft mesoporous silica nanoparticles with structural preservation**, Z. Zhang, L. López Pérez, H.J. Heeres, I. Melián-Cabrera, XVth Netherlands' Catalysis and Chemistry Conference (NCCC15), Noordwijkerhout, The Netherlands, 2014.
5. **Small is beautiful: Enhanced textural properties of mesostructured silica nanoparticles by non-thermal calcination**. Z. Zhang, H.J. Heeres, I. Melián-Cabrera, 4th International Colloids Conference Surface Design & Engineering, 15-18 June 2014, Madrid, Spain.
6. **Mild Upgrading of Pyrolysis Oil by combining Acid-catalyzed Alcoholysis and Selective Water Adsorption**. R. Pazhavelikkakathpurushothaman, Z. Zhang, T. Buntara, S.R.A. Kersten, H.J. Heeres, I. Melián-Cabrera, 25th Conference of the Organic Reactions Catalysis Society, March 2nd-6th 2014, Tucson, AZ, US.